

Using MS Excel to Tell a Spatio-Temporal Story: The Application of Excel2Earth

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The aim of this paper is to induce the software of Excel2Earth which can be downloaded freely on the website, http://excel2earth.ccs.ntu.edu.tw/spatial/Excel2Earth_en.html. We will discuss the advantage of using this software to organize spatio-temporal data, showing the procedure of converting worksheet data into kml files, and demonstrating on the Google Earth directly. The user will find that it is easy to mapping data, without complicated ArcGIS software like ArcGIS, MapInfo, etc. The software defined the location and boundary of each geographic unit using the coordinates directly, which is much easier to understand and modified, rather than the unfriendly shapefiles. Excel2Earth can create all kinds of layers, including polygons, points, lines, and add pictures and text on each geographical units if needed. Besides, not only mapping, Excel2Earth can do spatial computing as well. It is easy to find geographical features of data sets, and to show the results on the map.

In this presentation we will take the life journey of Dr. Sun Yat-sen as an example. After collecting varieties of information about Dr. Sun including the time and space of each event during his lifetime, related pictures, descriptions and so on. We organize these data in the form of worksheet, and convert it into kml files automatically, and then show the data on the globe finally. After doing so, you will find GIS and spatial analysis is an interesting and useful way to explore data and tell a story related to time and space.

Keywords: GIS, spatio-temporal data, Excel2Earth, Google Earth, spatial analysis